RMB Internationalization and Its Implications for Asian Monetary Cooperation

Yunjong Wang

The status of the renminbi (RMB), China's currency, is not commensurate with the country's global economic prowess as the world's largest trading nation and second largest economic power measured by GDP. When the global financial crisis revealed the inherent defects of the existing U.S. dollar-centric international monetary system, the government of People's Republic of China initiated efforts to promote the international use of the RMB. This paper reviews the historical experience of international currencies and examines the implications for RMB. It addresses some of the imperfections of the current international monetary system as well as the background and motivation of RMB internationalization. By evaluating the main developments since 2009, the paper deals with the remaining issues related to RMB internationalization, such as capital account liberalization, exchange rate regime, and domestic financial market reform. Findings indicate that the RMB will unlikely replace the role of the dollar, because the euro could not challenge the status of the dollar during the last decade. Despite without a formal monetary arrangement such as the euro, the RMB may achieve its status as a regional settlement currency within Asia, given the increasing volume of trade with China.

Yunjong Wang, Visiting Fellow, Korea Institute of Finance, and adjunct professor, Catholic University of Korea, Seoul YWCA Building 7th Floor, 20 Myong-Dong 11 Gil, Jung-Gu, Seoul, Korea 04538. (E-mail): yjwang00@hotmail.com, (Tel): +82-10-6269-0271.

The earlier version was presented at the Seventh Asia-Pacific Forum on Economics and Finance, organized by Central University of Finance and Economics, Beijing, People's Republic of China. The author is grateful to Barry Eichengreen, Masahiro Kawai, Liqing Zhang, and anonymous referees for their valuable comments.

[**Seoul Journal of Economics** 2017, Vol. 30, No. 1]

Keywords: RMB Internationalization, Monetary cooperation, International currency

JEL Classification: F31, F33

I. Introduction

Many international experts and authorities widely shared the view of America's inevitable decline when the global financial crisis, the worst economic crisis since the Great Depression, arose in 2008. While the U.S. has been severely buffeted by financial meltdown and economic setbacks, China has shown remarkable resilience with its steady growth trajectory. The real gross domestic product (GDP) growth rate of China recorded in 2010 was in double digits—10.4%.[1] China surpassed all other advanced industrial nations except for the U.S. in overall economic size, and is now rapidly closing the gap with the U.S.

The status of the renminbi (RMB), China's currency, is not commensurate with the country's global economic prowess. When the global financial crisis revealed the inherent defects of the existing U.S. dollar-centric international monetary system, the government of People's Republic of China (PRC) initiated efforts to promote the international use of the RMB. Since then, China has taken a gradual approach in seeking the global status of the RMB.

RMB internationalization is particularly interesting because China is the first emerging market economy attempting to internationalize its currency, without full capital account convertibility, free floating exchange rate, and credible domestic financial market. People's Bank of China (PBOC) appears well aware of the difficulties inherent in the experiment of RMB internationalization. To achieve the goal of fully advanced financial market through RMB internationalization, China must surmount many daunting obstacles. Beijing will have to deal with the unintended consequences of policy actions in the course of

[1] On January 22, 2010, the Chinese State Statistical Bureau announced that the real GDP growth rate of China remained at 8.7% in 2009, fulfilling the 8% target preset by the central government at the end of 2008. This remarkable achievement was mainly attributed to expansionary monetary and fiscal policies. See Xu (2010) for more details.

RMB internationalization. Presently, no one can surely predict whether China's experiment is doomed to fail.

A large volume of literature on RMB internationalization exists. Some papers deal with the feasibility of RMB internationalization in light of necessary conditions for currency internationalization originally introduced by Cohen (1971) and Kenen (1983). Other papers focus on the sequencing issue—on RMB internationalization—by drawing an inference from the literature regarding the order of economic liberalization in the transition from a planned economy to a market system. Several papers also review the benefits and costs of RMB internationalization in both domestic and global contexts. Some empirical analyses have recently provided insights into the currency composition of the RMB in using settlement, investment, and foreign exchange reserves. Nonetheless, research on the issue of monetary cooperation in the regional context is limited.[2] This paper intends to examine the various issues related to the emergence of the RMB as an international currency and future course of monetary cooperation in Asia.

The rest of the paper is organized as follows. Section II briefly reviews the historical experience of international currencies and draws implications for the RMB. Section III addresses some of the imperfections in the current international monetary system and the background and motivation of the recent emergence of RMB internationalization. Section IV discusses the main developments in RMB internationalization since 2009. Section V deals with the remaining issues related to RMB internationalization, such as capital account liberalization, exchange rate regime, and domestic financial market reform. Section VI highlights the implications of RMB internationalization for future Asian monetary cooperation. Finally, section VII concludes with the future prospects of RMB internationalization.

[2] Ito (2016) mentioned that the diversity of monetary and financial arrangements in Asia makes pursuing policy coordination difficult for Asian countries. However, he indicated that an increasing number of Asian countries will use RMB as denomination and manage their currencies so that their currencies will co-move with the RMB.

II. Historical Experiences of International Currencies

When ruminating on the future prospects of RMB internationalization, reviewing the historical experiences is helpful. This section briefly overviews the historical records of international currencies and draws the lessons and implications for the RMB.

After 1821, the monetary unit of Britain—pound sterling—was defined in terms of gold. The sterling price of gold was fixed. The gold standard allowed the paper currency to be freely converted into its gold equivalent at face value. The issue of Bank of England notes was strictly regulated by law after 1884; extra issues must be backed fully by gold. As Britain was not a gold producer, increases in the gold coin and banknote component of the stock of money depended on the net import of gold.

British monetary policy was dominated by the needs of the gold standard until the occurrence of the First World War in 1914. The main policy objective of the Bank of England was the maintenance of specie payments or the convertibility of its notes for gold at face value on demand, ensuring the fixity of the link between the pound sterling and gold. The pound was not only a national currency but also widely used internationally as a trade settlement and reserve currency, and the world's major financial and gold markets were in London. Both domestic and international users of the pound had high confidence in the currency. The bank's task was to maintain this confidence by ensuring convertibility into gold. The bank was successful in the changing economic environment fifty years before 1914 (Ford 1981).

Historians estimate that roughly 60% of the world trade was invoiced in pound sterling in the late 19th century. In 1899, almost two thirds of known foreign exchange holdings of official institutions were in pound, and this figure was more than twice the total of the next competitors, the French franc and German mark. The U.S. dollar was not yet considered as an internationally used currency at that time. The ranking of the four currencies remained the same in 1913. By 1917, the U.S. dollar emerged as a major international currency. Foreign central banks began to hold dollar reserves, and the currency was increasingly used in trade and finance. Interestingly, the dollar's main problem prior to 1914 was not the size of the economy: the U.S. economy had surpassed the U.K. economy in 1872. Rather, the country lacked deep, liquid, and open financial markets. The U.S. also did not own a central bank, which was considered a prerequisite for developing financial market instruments, such as bankers' acceptance. The dollar also fell short in terms of foreign confidence in its value because the U.S. frequently experienced banking crises and lacked a lender of last resort (Frankel 2012).

In an effort to provide the financial system with an institution that could serve as a lender of last resort in times of crisis and help improve financial stability, the Federal Reserve Act was passed in 1913, creating the Federal Reserve System (Fed).[3] Upon the establishment of the central bank, the U.S. rapidly progressed in providing trade credit. Eichengreen (2011) argues that the establishment of a market in dollar-denominated trade acceptances among banks dramatically promoted the internationalization of the U.S. dollar. The Fed could establish the credibility of the dollar as a source of reliable trade credit by becoming a leading market-maker in the secondary market for dollar-denominated trade acceptances. The international role of the dollar developed along with the financial markets. The onset of the First World War accelerated the improvement of the status of dollar: large-scale wartime lending by the U.S to the U.K. and other nations involved reversed the 19th century creditor–debtor relationship and positioned the dollar as a strong and credible currency (Frankel 2012).

Notwithstanding the Fed's active role in the trade acceptance market (Eichengreen 2011) ultimately, the rise of the dollar to global status was predominantly market driven (Maziad, and Kang 2012). Frankel (2012) also emphasizes that the rapid ascent of the dollar occurred without any desire, whether on the part of the public or politicians, for international prestige or power on the world stage, and the Fed did not actively promote a special global role for the currency.

Eichengreen (2011) claims that by the second half of the 1920s, more than half of U.S. imports and exports were financed by bank acceptances denominated in dollars. The attractiveness of doing business in New York reflected the fact that the interest rate that importers and exporters must pay then was nearly a full percentage lower than that in London. He wrote, "From a standing start in 1914,

[3] The Fed was purposefully structured to remain weak by decentralizing its power among 12 loosely connected regional central banks, reflecting the nation's suspicion toward large banking. This lack of leadership was a major reason for the inept behavior of Fed during the Great Depression.

the dollar had already overtaken pound by 1925. This should be taken as a caution by those inclined to argue that incumbency gives the dollar formidable advantages today (Eichengreen, 2011, p. 32)."

With regard to RMB internationalization, this historical experience vividly demonstrates that the current dollar dominance cannot persist endlessly. Eichengreen (2011) argues "it is not impossible to imagine something analogous today. For the wartime shock to sterling, substitute chronic U.S. budget deficits. And for the efforts of the Fed to establish a market in trade acceptances in New York, substitute the efforts of Chinese officials to establish Shanghai as an international financial center. The renminbi replacing the dollar may not be anyone's baseline scenario, but it is worth recalling the history of the 1920s before dismissing the possibility."

Another critical time in the ascent of the U.S. dollar to global currency status was the development of a thriving offshore U.S. dollar market, Eurodollars. Eurodollars are time deposits denominated in the U.S. dollar at banks outside the U.S. and thus are not under the jurisdiction of the Fed. Consequently, such deposits are subject to much less regulation than similar deposits within the U.S. Without these offshore markets, the dollar would not have attained its dominant role (He, and McCauley 2010). Nevertheless, the U.S. government did not intend to create the offshore dollar market. On the contrary, offshore market was accidentally created from entirely pure market reactions.

After the Second World War, a large amount of the U.S. dollar was supplied to Europe as a result of both the Marshall Plan and imports into the U.S., which had become the largest consumer market. Consequently, enormous sums of the U.S. dollar were in the custody of foreign banks outside the U.S. Some foreign countries, including the Soviet Union, also had deposits in the U.S. dollar in American banks, granted by certificates. The Soviet Union started to transfer their deposits into a safe place, such as a British bank in fear of confiscation during the Cold War period. British banks subsequently deposited that money in U.S. banks. In the mid-1950s, Eurodollar trading and its development into a dominant world currency began when the Soviet Union requested improved interest rates on their Eurodollars. Offshore banks were free of reserve requirements and deposit insurance assessments, and thus they could pay a slightly higher interest rate on Eurodollars than onshore banks.

He, and McCauley (2010) also point out that the development of the Eurodollar market was a reaction to capital controls in the U.S., particularly the interest equalization tax of 1963 and later restraints on capital exports. U.S. authorities also placed restrictive capital controls from the late 1960s until early 1970s when the U.S. found the maintenance of overvalued exchange rates increasingly difficult. However, the authorities never restricted the flow of payments through U.S. banks to allow the settlement of offshore trade and investment transactions, enabling the offshore market to flourish despite capital controls onshore.

Under the Bretton Woods system, the U.S. maintained the dollar on the de facto gold standard, and other countries fixed their exchange rates to the dollar. Although the stated purpose of Bretton Woods was to encourage capital and trade flows, the system actually allowed many avenues for governments to manipulate exchange rates and regulate capital flows. To secure fixed exchange rate and independent monetary policy, free capital mobility cannot be achieved simultaneously.[4] During the mid-1960s, however, international capital flows began to gradually expand. Expanding capital flows eventually led to the collapse of the Bretton Woods system. President Nixon took the dollar entirely off gold in 1971, and the fixed exchange rate system completely ended in 1973 (Frankel 2012).

After the disintegration of the Bretton Woods system (1971-73), many assumed that countries would need reduced reserves. Considering the flexibility of exchange rates, a shock to the balance of payments could be absorbed by allowing currencies to adjust. Central banks no longer have to hold other currencies to intervene in the foreign exchange markets. Eichengreen (2011) notes two surprises. The first one was the absence of decline in the demand for reserves. When shifting to flexible exchange rates, countries held the same or even more reserves. Countries intervened when they concluded that the exchange rate had

[4] International macroeconomics has often postulated the trilemma: with free capital mobility, independent monetary policies are feasible if and only if exchange rates are floating. However, Helen Rey (2013) has recently dismissed the traditional view of open economy. She wrote "fluctuating exchange rates cannot insulate economies from the global financial cycle, when capital is mobile." The trilemma morphs into a dilemma: independent monetary policies are possible if and only if the capital account is managed, directly or indirectly, regardless of the exchange rate regime.

deviated too far from its fundamental value. Their intervention resulted in the accumulation of reserves. The second surprise was that no shift away from the dollar occurred. The dollar share of total foreign reserves remained close to 80% in 1977, as the U.S. pumped out dollars and the members of the Organization of Petroleum Exporting Countries (OPEC), who priced oil in the U.S. dollar, parked their earnings in New York.

U.S. dollar inflation and depreciation started to impair the international attractiveness of the dollar as a store of value after 1977. The U.S. was perceived to be neglecting its responsibility to provide the "public goods" of a stable anchor for the international monetary system (Frankel 2012). Predictably, the dollar resumed its decline. Complaints mounted about U.S. policy and the losses experienced by foreign holders of dollars. OPEC rediscussed the possibility of pricing oil in another currency. The dollar share in foreign exchange reserves sharply declined from around 80% in 1977 to below 60% in 1980. In 1977-1980, when talks about the dollar losing its exorbitant privilege abounded, the primary reason for its declining share of global reserves was that the value of other currencies inflated as the dollar depreciated and not that central banks sold what they held. The dollar share stabilized after the Volcker took over the Fed, and the currency subsequently strengthened (Eichengreen 2011).

In the 1980s, central banks around the world gradually began to hold Deutsche mark and Japanese yen as foreign exchange reserves although both Germany and Japan were not enthusiastic toward the internationalization of their currencies. German policy was actually opposed to internationalization. In terms of foreign policy, a strong aversion to the behavior of showing off in the world stage was observed. Domestically, the powerful manufacturing sector feared that internationalization would lead to appreciation of Deutsche mark, thus hurting export competitiveness.[5] Despite this official resistance, the mark continued to gain international status throughout the 1980s as a result of the growing size of the German economy (especially trade) and

[5] Frankel (2012) points to the distinction between the financial sector, which supports a strong currency, and the manufacturing sector that does not. He suggests that the financial sector can be more influential in countries where it is large and powerful: the U.K. and Switzerland. However, the financial sector was excessively small, relative to the manufacturing sector, to carry significant weight in Germany and Japan.

the impeccable reputation that the Bundesbank had established for keeping the strong value of mark. The trend was reversed in the 1990s for numerous contributing factors, including the slow economic growth after German reunification in 1991 and regained strength and credibility of the U.S. economy as reflected in sustained noninflationary economic expansion, steady elimination of budget deficits, and appreciation of the dollar in the second half of the 1990s (Maziad, and Kang 2012).

The Japanese yen was also a new player in the currency competition. Although the yen share in the global reserves had risen in the 1970s, other measures of internationalization, such as the use of the currency in invoicing trade or denominating debt, continued to show a low share. Similar to Germany, the prevailing perception was that increased demand for the yen would hurt export competitiveness. During the first half of 1980s, the Japanese government continued to oppose internationalization. By the mid-1980s, the policy shifted toward actively promoting internationalization in the context of the Yen/Dollar Agreement and later with the Plaza Accord aimed at depreciating the dollar and resolving serious global imbalances. The international use of the yen rose gradually in the 1980s and its share of foreign reserves reached almost 9% in 1991, which was the peak (Talvas, and Ozeki 1992).

In the 1990s, official policy shifted firmly in favor of internationalization, with the aims of reducing exchange rate risk for domestic firms, facilitating business for Japanese banks and other financial institutions, and promoting Japan as a financial center. A comprehensive package of financial liberalization of 1996 and the resulting "big bang" of 1998, however, were not successful in advancing the yen internationalization. Such failure was largely due to the stagnation of the Japanese economy since the bursting of the equity and real estate bubbles at the start of the 1990s. Takagi (2011) wrote "by the end of 2003, it was clear that any further attempt to internationalize the yen would be futile without a fundamental change in the economic might of Japan."

The experiences of the U.S. dollar, mark, and yen highlight that currency internationalization is largely market driven. The rapid ascent of the dollar occurred without any deliberate desire for boosting its international standing. Similarly, the Deutsche mark and Japanese yen rose as alternative currencies to the dollar, when the U.S. economy faced severe economic downturns. As the U.S. regained its economic strength and financial credibility, the trend was immediately reversed.

On the contrary, when Germany and Japan were mired in economic difficulties since the early 1990s, their potentially promising currencies could no longer advance their global status vis-à-vis the dollar. In short, the process of currency internationalization is broadly determined by the country's economic strength, credibility of the currency, and financial sector development and stability. This implies that the fundamental drivers for RMB internationalization will be largely market-determined rather than determined by political aspiration alone.

III. Defective International Monetary System and Emergence of RMB Internationalization

Throughout history, relations between dominant states and rising ones have been unstable. Established powers tend to regard themselves as defenders of an international order they help create and from which they continue to benefit; rising powers feel constrained, even cheated by the status quo and struggle against it to take what they think is rightfully theirs. These patterns are clearly visible today in the behaviors of the U.S. and China (Friedberg 2011).

The global financial crisis revealed the inherent deficiencies of the existing international monetary system. As evident in previous crises, numerous proposals for reforming the international monetary and financial architecture were put forward. On March 23, 2009, PBOC Governor Zhou Xiaochuan, in particular, published a three-page long essay, wherein he asked "what kind of international reserve currency do we need to secure global financial stability and facilitate world economic growth, which was one of the purposes for establishing the International Monetary Fund (IMF)" (Zhou 2009). He pointed out that the desirable goal of reforming the international monetary system was to "create an international reserve currency that is disconnected from individual nations and is able to remain stable in the long run." He emphatically made a proposal for creating a super-sovereign reserve currency on the basis of special drawing rights (SDR).[6] He suggested that the IMF and countries concerned should "actively promote the use

[6] As Zhou noted in his essay, the role of the SDR has not been fully acted because of the limitations on its allocation and the scope of its uses. The SDR has become largely irrelevant except in its minor role as an accounting unit. Moreover, no liquid private market in SDR assets exists.

of the SDR in international trade, commodities pricing, investment and corporate book-keeping" and "creating financial assets denominated in the SDR to increase its appeal." His proposal is an attempt to deprive the U.S. dollar of its "exorbitant privilege," which was then shared by many countries in the world (Yu 2014).

Zhou's proposal was treated respectfully as a contribution to the global monetary governance debate. However, the reform of the international monetary system has been historically difficult without the strong support of the U.S. government. Few industrialized countries were serious about replacing the U.S. dollar with the SDR (Yu 2014). As Yu introduced in his paper, the PRC leadership was unable to challenge the supremacy of the U.S. dollar. Thus, the proposal of Governor Zhou was simply dismissed as "personal" by a spokesman of the Ministry of Foreign Affairs right after U.S. President Barack Obama dismissed Governor Zhou's proposal by saying that a world currency was unnecessary and the U.S. dollar was strong at that current time.

PBOC Governor Zhou's ambitious proposal is closely linked to the need for an international lender of last resort (ILLR), which dates back to the inception of the Bretton Woods system, with the British proposal for an International Clearing Union (ICU). Back in the 1940s, John Maynard Keynes had already proposed to introduce an international currency unit named "Bancor" based on the value of 30 representative commodities. The ICU would provide automatic financing for current account deficits. Keynes' proposal was turned down in favor of the U.S. proposal, which was based on the idea of a credit union "in which each member's access to balance of payments finance was to be based on the quota it contributed to the common pool and on a reciprocal commitment to grant credit to other members" (Gianini, 1997, p. 17).

The issue of an ILLR may be simplified into two questions. The first is whether an ILLR is necessary. If so, the second question is what institutions, or group of institutions, should assume this responsibility. Kindleberger (1973, 1989) claimed that the international dimension of crises makes a case for such global institution. When a crisis arises, countries may face limited access to private capital markets although they are not suffering from serious structural problems and are implementing appropriate policy corrections. As a domestic lender of last resort can act promptly to prevent a bank run of an illiquid but solvent financial company, an international equivalent can be expected to play a similar role not only in enabling an illiquid but solvent country to survive but also in arresting contagion to other countries. The rationale for intervention in the form of official public financial organizations at both national and international levels is related to the intrinsic instability of the global financial markets (Park, and Wang 2002).

With regard to the second question, the debate on the reform of the international financial architecture has effectively ruled out the possibility of creating a global central bank. Eichengreen (2000), for instance, dismissed the idea of a global central bank as quixotic, leading to the question of whether and how the existing Bretton Woods institutions should be reconstructed to serve as a lender of last resort. As the global financial crisis demonstrates, the main pillars of the international financial architecture have not been seriously amended. The financial resources of IMF have been immediately expanded after the global financial crisis, but the main supply of the global liquidity was provided by the central banks of the major countries (the U.S., Europe, and Japan) on behalf of unconventional quantitative easing (QE).

Even before the global financial crisis emerged, Chinese elites had long been highly concerned about their excessive dependence on the U.S. dollar, particularly in the form of dollar-denominated assets. To reduce excessive dollar reliance, China should diversify its foreign reserves. Considering that the euro performed successfully from its creation to the outbreak of the global financial crisis, China attempted to increase the share of euro in the currency composition of its own foreign reserves. However, the European Central Bank (ECB) cannot legally issue its own bond (so-called euro bond). Only member countries can issue their government bond, but the market size of individual members has been relatively small. As China continues to accumulate foreign reserves at a rate of approximately 400 billion USD a year, no alternative market exists except for the U.S. Treasury bond market. Moreover, in foreign reserve management, central banks tend to put more weight on safety and liquidity rather than asset returns. Thus, asset classes only eligible for foreign reserve holdings are limited. China as the number one country of foreign reserve holdings has inevitably fallen into the dollar trap.

In this situation, China could not sacrifice its exchange rate stability by adopting a flexible exchange rate regime. At the same time, China could not fully open the capital account and relinquish independent monetary policy. As the impossible trinity (*i.e.*, trilemma) states, China could not acquire free capital mobility, independent monetary policy, and fixed exchange rate simultaneously. China has been pursuing an intermediate zone by having a limitedly independent monetary policy, strongly managed exchange rate, and partially open capital account.[7] Above all, to maintain the stable exchange rate of the RMB, China should continue to accumulate its foreign reserves by increasing holdings of U.S. Treasury bonds. Summers (2004) correctly picked out China's weakness and stated that "it is true and can be argued forcefully that the incentive for Japan and China to dump treasury bills at a rapid rate is not very strong, given the consequences that it would have for their own economies." Summers called this a "balance of financial terror," wherein China simply cannot stop financing the U.S. (He 2015). Even in the two years following the global financial crisis, China actually increased its holdings of U.S. Treasury securities. China must escape the dollar trap in the medium and long run. One way is the creation of international currency, such as SDR, as ambitiously proposed by Governor Zhou. As the proposal was bluntly rejected by the U.S. and the international financial community, China's only option is to promote RMB internationalization, although this approach is yet to be adopted and no one can clearly predict how long the process will take.

IV. RMB Internationalization: Progress and Limitations

Before 2009, only sporadic discussions on RMB internationalization existed. On March 9, 2008, then Senior Deputy Governor of PBOC, Wu Xiaoling, said that the conditions for RMB internationalization were immature and it was not on the agenda yet. Nevertheless, she thought that the issue of creating an offshore financial center in Hong Kong should be studied. In September 2008, Wu emphasized that to make the RMB an international currency, two conditions must be satisfied: the full convertibility of the RMB and the width and depth of the RMB financial market must be accomplished vis-à-vis those of the U.S. dollar financial market (Yu 2014). Such ambiguous attitude toward

[7] The PRC's monetary autonomy (independence) has been reduced with falling capital control effectiveness and rigid exchange rate regime that remains tightly managed against the U.S. dollar (Kawai, and Liu 2015).

RMB internationalization has changed after Governor Zhou's proposal was turned down by the international community. In spite of the unfinished market-oriented reform on the exchange and interest rate and strictly controlled capital account, PBOC started to promote RMB internationalization in a low-profile manner through cross-border trade settlement, offshore RMB market establishment, and swap agreements with other central banks.

As suggested by Wu Xiaoling, PBOC officials clearly understood the kind of sequencing that would be the most desirable and feasible for RMB internationalization. The general consensus states that the external financial liberalization should be the last step in the economic liberalization of a typical emerging market economy (McKinnon 1991). In most cases, the domestic financial market reform is a prerequisite of an external financial liberalization. However, the domestic financial reform is a never-ending task considering the powerful vested interest groups in the emerging market economies, in which China is no exception. In China, groups such as large state-owned commercial banks, state-owned industrial enterprises, export industries, local government, real estate and construction industries, and anti-liberalization policy makers not only benefit from the financial repression and pro-growth state-led economic development model but also tend to oppose any serious policy changes, including the exchange and domestic interest rate liberalization. Thus, the current route of RMB internationalization under the dual control of the capital account and exchange rate highlights the dominance of PBOC in governing the process (He 2015).

PBOC has never clearly announced the official timetable for RMB internationalization. The bank's approach toward RMB internationalization is cautious so as not to infuriate the powerful anti-liberalization groups. All the measures taken for RMB internationalization thus far have been gradual and manageable. RMB internationalization is promoted in an unconventional manner, with the perception that China is not yet fully prepared for liberalizing its capital account as well as has not finished its market-based exchange rate regime and finalized its market-oriented domestic interest rate (particularly deposit rate). Therefore, RMB internationalization is an unfinished agenda and essentially tantamount to an ultimate goal for China's global financial supremacy. As clearly pointed out by He (2015) and Volz (2013), China's current approach toward RMB internationalization has been triggered mostly by the aspiration of

PBOC for domestic financial reform, along with the country's defensive reaction to reduce its excessive dependence on the U.S. dollar.

Since 2009, PBOC has adopted a functional approach to promote the role of the RMB as a settlement, investment, and finally reserve currency. As Yu (2014) noted, this approach is exactly the same with that proposed by Zhou (2009) regarding the use of the SDR as a supranational currency in place of the U.S. dollar.

A. Trade Settlement in RMB

In April 2009, PBOC announced a pilot scheme of trade settlement in RMB, which was initially limited to five pilot cities but immediately broadened to include 20 provinces and cities in the mainland in 2010. Given that China was running a current account surplus, the strategy was to use the RMB as an import settlement currency. To encourage non-residents (including foreign exporters) to accept RMB payments, RMB recycling channels should be established for non-residents to invest their RMB proceeds in RMB-denominated assets. In particular, residents in Hong Kong were encouraged to hold RMB deposits, corporate bonds, and government bonds. The progress in using the RMB as a settlement currency was impressive. Since the third quarter of 2010, the amount of RMB trade settlement increased dramatically. In the first quarter of 2013, the quarterly trade settlement in RMB surpassed 1 trillion CNY or around 11% of the PRC's total trade.[8] RMB cross-border trade settlement in 2014 reached 6.55 trillion CNY. A total of 25.4% of the PRC's trade was settled in RMB, compared with almost zero in 2009. However, the RMB was used only for Chinese exports and imports and not for third party trade settlement. Such trade settlement was mostly made between Mainland China and Hong Kong.[9] As a result, RMB deposits in Hong Kong also rose dramatically during the past three years. Hong Kong remains the single largest repository of offshore RMB deposits. The amount of RMB deposits in Hong Kong reached 1 trillion CNY in December 2014. These outcomes demonstrate the importance of Hong Kong in the course of RMB internationalization

[8] CNY is the official ISO code for the renminbi. Market practitioners, for their convenience, labeled the renminbi traded in the offshore markets the CNH rather than the CNY.

[9] Approximately 80 percent of trade settlement in RMB is through Hong Kong.

(Zhang, and Tao 2014).

The RMB has been used as a settlement currency for exports and imports between China and Korea. In 2011, the proportion of RMB settlement was 0.8% for Korean exports to China and 0.1% for Korean imports from China. In the third quarter of 2015, the proportion increased to 3.4% for exports and 3.3% for imports. Since 2014, when offshore RMB clearing bank was established in Seoul, the RMB has been widely used in bilateral trade settlements. Nevertheless, the proportion of RMB settlement in Korea's overall trade remains negligible at less than 0.1%. Even between Korea and China, almost 93-95% of trade is settled in the U.S. dollar. In the trade between EU and Korea, the proportion of euro settlement is almost 50% for Korean exports and 40-43% for imports. Similarly, in the trade between Japan and Korea, the proportion of yen settlement is almost 50% for Korean exports and 45-47% for Korean imports. The relatively low presence of RMB settlement is mainly due to the relatively expensive transaction costs, legacy, inconvenience, and limited financial products for RMB holdings.[10]

According to the data provided by the Society for Worldwide Interbank Financial Telecommunication (SWIFT), the international use of the RMB has surged in the past few years. The ranking of the RMB in the league of world payment currency by value rose from the 17th most commonly used currency by the end of 2011 to the top five currency in November 2014 (SWIFT 2012, 2016). The RMB now ranks after the Japanese yen, British pound, euro, and U.S. dollar.

B. Cross-Border Direct Investment in RMB

Since January 2011, PRC enterprises have been allowed to invest offshore in RMB for greenfield investment, mergers and acquisitions, equity participation, and other means of acquiring direct ownership or actual control. Enterprises can raise RMB funds onshore and remit the

[10] Rhee, and Sumulong (2014) pointed out that transaction costs of using non-U.S. dollar currencies were high because adequate settlement infrastructure has not been built. They proposed an interim solution by establishing proper regional settlement infrastructure for regional currencies to significantly reduce the transaction costs. To do so, a combined system for both trade and government bonds settlement in RMB can be considered for simultaneously promoting RMB internationalization and RMB-denominated bond market.

funds offshore via onshore banks. The offshore branches of onshore banks can raise RMB funds onshore and extend loans to enterprises for offshore investment. Similarly, as of October 2011, foreign enterprises have been allowed to invest onshore in RMB. However, in July 2012, the PBOC restricted RMB foreign direct investment in securities, derivatives, and properties. The scale of RMB settlement for foreign direct investment was much greater than for overseas direct investment. In 2014, the total amount of the cross-border direct investment reached 1,049 billion CNY; approximately 862 billion CNY of which was foreign direct investment, and roughly 187 billion CNY was overseas direct investment (International Monetary Institute 2015).

C. RMB Offshore Market

Building the RMB offshore market is essential for overcoming the inherent limited convertibility of the RMB and expanding its use outside Mainland China. In this market, non-residents can access the RMB for trade and investment and are encouraged to buy RMB-denominated assets while China's monetary authorities retain control over the speed of capital account liberalization. Unlike the Eurodollar market that grew rapidly outside the jurisdiction of the U.S. in the 1950s and 1960s, the RMB offshore market is currently being driven by RMB internationalization initiative and various policies.

Mainly through RMB import settlement, RMB offshore market has been growing rapidly in Hong Kong.[11] Other RMB offshore markets in London, Singapore, and Taipei were also eager to expand offshore RMB businesses. From the middle of 2010 to the third quarter of 2011, RMB deposits held by Hong Kong residents skyrocketed. The total amount of RMB deposits was expected to surpass 1 trillion CNY by the end of 2012. However, the actual amount stood at 720 billion CNY by the end of 2012. The decline could be attributed to the weakening of RMB appreciation expectation, which in turn was caused by the weakening of the PRC's balance of payments.

In 2005, the PRC permitted domestic financial institutions to issue RMB-denominated bonds (so-called "dim sum" bonds) in Hong Kong.

[11] Hong Kong, which has benefited from its unique relation with the PRC, has enjoyed the first mover advantage in developing offshore RMB businesses (Cheung, and Yiu 2016).

In August 2011, the PRC's Ministry of Finance issued 20 billion CNY of government bonds in Hong Kong. This particular issuance was a major boost to RMB internationalization and an incentive to the people in Hong Kong (Yu 2014). Following this event, a number of PRC and foreign financial institutions and multinational enterprises have joined the issuance of RMB-denominated bonds. Moreover, according to a May 2012 provision announced by the National Development and Reform Commission, the nonfinancial institutions were also allowed to issue RMB-denominated bonds in Hong Kong, China.[12] The outstanding RMB-denominated bonds amounted to 367 billion CNY by end of October 2015 (HKMA 2016). Hong Kong owns the largest offshore liquidity, handling 70% of all RMB payments globally (HKMA 2016). Although Hong Kong remains the most important offshore RMB hub, it is now facing competition from Europe and other emerging RMB centers.[13] China is strategically building a network of offshore RMB centers across different geographic locations and time zone. In 2015, China assigned an offshore RMB clearing bank (one of the PRC's four large state-owned banks) in the 20 offshore RMB centers, listed in Appendix Table1.

In addition, the most important development in RMB offshore market is the introduction of RMB qualified foreign institutional investors (RQFII). The China Banking Regulatory Committee, PBOC, and State Administration of Foreign Exchange jointly initiated the RQFII scheme on December 16, 2011. According to this scheme, qualified foreign institutional investors were allowed to invest in the PRC's A-share market in RMB. At the beginning, the RQFII quota was 20 billion CNY. In April and November 2012, the quota was raised to 50 billion CNY and 200 billion CNY, respectively.

[12] Two Korean state banks—Korea Development Bank and Export Import Bank of Korea—issued dim sum bonds three times. In terms of market weight, these two banks are currently included in the top 10 issuers. On September 28, 2016, Shanghai-based China Eastern Airline has first issued Arirang bonds, which are Korean won-denominated bonds issued by a foreign entity, among Chinese firms. The first-ever Arirang bonds were initiated by the Asian Development Bank in September 1995 when it issued bonds worth 8 billion won. However, the market for Arirang bonds is extremely small.

[13] China's endorsement is critical for overseas financial centers to set up the infrastructure and acquire the RMB liquidity for their offshore RMB businesses, because the RMB is not fully convertible and is subject to capital controls.

D. Currency Swaps with Foreign Central Banks

Initially, the swap arrangements of PBOC with other central banks were mainly aimed at providing liquidity support to its counterparts, as the U.S. conducted currency swaps with several countries (*e.g.*, South Korea, Brazil, Mexico, and Singapore) mainly to provide dollar liquidity for those countries in times of crisis. From 2008-2009, following the global financial crisis, the PRC signed eight currency swap agreements. However, in line with RMB internationalization, the swap arrangements were mainly aimed at encouraging the foreign central banks to hold RMB as foreign exchange reserves. Currently, China has maintained currency swap agreements with 32 countries, including Indonesia, Singapore, South Korea, Hong Kong, Thailand, and Malaysia in East Asia. In particular, the bilateral currency swap with South Korea was first signed in December 2008 right after the global financial crisis, and was renewed and expanded in amount several times.

E. RMB as SDR basket currency

On November 30, 2015, the Executive Board of IMF decided that effective October 1, 2016, the RMB is included in the SDR basket as a fifth currency, along with the U.S. dollar, euro, Japanese yen, and pound sterling. Specifically, the IMF decided that the RMB meets the existing criteria for SDR basket inclusion. The IMF Board determined, with sufficient basis, that the RMB is a freely usable currency, given that China meets the export criterion. This decision is certainly a significant milestone of RMB internationalization. The steady increase in RMB internationalization will depend on China's strong commitments to continue economic and financial reforms while representing its expanding role in global trade and direct investment.

In the Fund's lending transactions, when members borrow from the Fund, they may receive the RMB in their transactions, and when they make payments to the Fund, they are asked to pay in RMB. Mainly the SDR users, including the IMF itself, have been preparing for the change, which includes opening onshore RMB accounts and establishing banking relationships and procedures required to transact the RMB as well as Fund-related and reserve management transactions. However, the inclusion itself will not dramatically increase the demand for RMB as reserve currency. If China would like the RMB to join the club of reserve currencies, the country must allow its currency to obtain the status of the “safe haven” currencies. The decision of central banks to hold their reserves in particular currencies depends on the structure of the country’s balance sheet of external assets and liabilities to avoid currency mismatch. In addition, holdings of foreign reserves must be easily cashable in times of currency and debt crisis. According to the criteria of liquidity, breadth, and openness, Chinese financial markets remain behind the major reserve currencies, such as the U.S. dollar and euro.

Fortunately, the RMB will be identified in the IMF’s currency composition of foreign exchange reserves on the fourth quarter of 2016. The separate identification of the RMB implies that IMF member countries can record, as official reserves, their holdings of RMB-denominated external assets that are readily available for meeting balance of payment financing needs. The RMB will join the group of currencies that are currently identified in the survey, namely, the U.S. dollar, euro, yen, pound sterling, Swiss franc, Australian dollar, and Canadian dollar.

V. Unfinished Agendas toward Full RMB Internationalization

In Plaza Accord in 1985, the motive of the U.S. to promote the internationalization of the Japanese yen was based on a hypothesis that it would lead to yen appreciation and help the U.S. exports. The international use of the yen gradually continued to rise in the 1980s along with the Japanese monetary authority’s liberalization of capital account. However, the Japanese monetary authority frequently intervened to prevent the yen from appreciating. Understandably, a tension between the goal of internationalization and the goal of keeping the currency competitively valued existed. However, only strong currency could attain full internationalization status. Markets only accept strong currencies whose value can be maintained. In this regard, overcoming the “fear of floating” in China’s monetary authority and policy circles remains questionable. China’s preparedness to shift from the export-oriented growth strategy to the domestic demand-led growth strategy continues to be uncertain. Under the “new normal” paradigm, China has accelerated its structural adjustments and institutional reforms. These new developments are certainly beneficial to China and other neighboring countries. China must no longer be anxious about RMB appreciation.

As China moves forward to RMB internationalization, PBOC will adopt a much flexible exchange rate regime. The current managed floating exchange rate regime will not be immediately abolished.[14] Instead, PBOC aims to give great scope to the market in determining the RMB exchange rates. At the same time, PBOC enjoys the incentive to economize a substantial amount of foreign exchange reserves on its own. Two scenarios can be assumed, namely, to keep holding significant amount of reserves like Japan and minimize the holdings of reserves like the U.S. or the members of ECB. China must observe the situation during the transition period. Abrupt adjustment of foreign exchange reserves will affect asset prices, particularly the U.S. Treasury bills, which will result to smooth adjustments. Nonetheless, many emerging market countries also move together to hold much RMB-denominated assets in their foreign exchange reserves as RMB internationalization progresses.

Formidable challenges in RMB internationalization remain on both the domestic and international fronts. A short list includes 1) the deregulation of domestic market interest rates, 2) full development of benchmark financial products, such as government bonds with various standard maturities, 3) free entry of foreign institutions to domestic financial markets, 4) freedom from capital restrictions, and 5) much flexible exchange rates. At the same time, organizing strong and sound macro-prudential regulations and effective and competent financial supervisory institutions are required. However, capital account liberalization is likely to result in boom–bust cycles. During the transition period, China must be cautious of volatile capital flows. Large fluctuations in the capital flows also generate financial market instability in the region. Many Asian countries are vulnerable to China-originated shocks. Thus, RMB internationalization must be gradual, persistent, and orderly. Otherwise, it will bring about damage in and out of China.

[14] On July 21, 2005, the PRC authorities announced that they would revalue the RMB against the U.S. dollar and move away from the long-standing U.S. dollar peg system to a managed floating system. In the summer of 2008, the PRC authorities decelerated the pace of RMB appreciation and restored a U.S. dollar peg system for the RMB. In June 2010, they abandoned the peg once again, resuming RMB appreciation against the U.S. dollar. See Kawai, and Pontines (2014) for more details.

The initiative of “One Belt and One Road (OBOR)” advocated by President Xi Jinping in 2014 is a new model of open regionalism, which not only is conducive to China’s western development but also helps to build a new infrastructure for neighboring countries. The initiative aims to provide public goods through enhanced connectivity—trade, investment, finance, people, and culture. Many developing countries in Asia continue to suffer from serious shortage of infrastructure, which hinders their economic development and their connectivity to other trading partners. China showed leadership by playing a large role and sustaining much responsibility on global economic governance. The China-initiated Asian Infrastructure Investment Bank (AIIB) will play a vital role in infrastructure financing. However, the role of the RMB remains limited because the AIIB financing will mostly be carried out in the U.S. dollar. The U.S. has not yet joined the AIIB as a signatory member. However, the lending facilities of AIIB and its leveraged capital will be likely denominated in dollars because dollar financing is cost saving.

The OBOR initiative can be combined with RMB internationalization, particularly in the area of settlement and financing. The RMB can be used for long-term project financing currency if China’s state-owned banks jointly co-finance the project. At the same time, Chinese overseas investment will boost the economic development along with infrastructure building. Such overseas investment carried out by Chinese corporations will provide support for RMB internationalization. The OBOR region will settle the transactions of trade and international direct investment using the RMB. To do so, more RMB offshore clearing banks should be established in the OBOR region for the settlement and financing. Moreover, European countries joined the AIIB as founding members, demonstrating strong business interests in various infrastructure projects. RMB clearing banks already established in Europe will enhance the recycling of the RMB through various channels. Thus, the RMB-denominated bank lending to the OBOR region or the RMB-denominated international debts issued by the OBOR countries for infrastructure financing will definitely facilitate RMB internationalization. Despite the many remaining controls in capital account, China can pursue RMB internationalization in an unconventional manner.

VI. Implications for Asian Monetary Cooperation

As the Asian financial crisis of 1997-98 amply demonstrated, countries in the region were closely interrelated and simultaneously vulnerable to contagion from one another. As Calvo *et al.* (1996) noted earlier in the 1990s, "global factors affecting foreign investment tend to have an important cyclical component, which has given rise to repeated booms and busts in capital inflows." As the recent literature also confirmed, excessive credit growth is one of the best predictors of crisis.[15] Many Asian countries became victims of such volatile capital flows. In reality, financial instability is unlikely to remain within the national borders of the country of origin. Cooperative efforts at both regional and global levels are required to counter negative spillovers. As long as the crisis remains country-specific, unaffected countries have no urgent political need to pay the significant costs associated with playing the role of a fire fighter. Nevertheless, neighbors help put out a fire before it spreads to them.

The formation of a regional financial arrangement in East Asia also reflects frustration with the slow reform of the international financial system (Park, and Wang 2002). As long as the structural problems on the supply side of international capital, such as volatile capital movements and exchange rate gyrations of major international currencies, persist, Asian countries will remain as vulnerable to future crises unless they keep accumulating huge amount of foreign exchange reserves. Thus, Asian countries should work together to create their own cooperative arrangements. Recognizing the need to establish regional financial arrangements for supplementing the existing international facilities, the finance ministers of ASEAN+3 at their meeting in Chiang Mai, Thailand in May 2000 agreed to strengthen the existing cooperative frameworks in the region through the Chiang Mai Initiative (CMI).

In 2010, the Chiang Mai Initiative Multilateralization (CMIM) replaced the CMI. CMIM introduced collective decision-making procedures for CMI swap activation and adopted a self-managed reserve pooling arrangement governed by a single contractual agreement. The total size of the CMIM doubled to 240 billion USD in May 2012. However, the

[15] See Gourinchas, and Obstfeld (2012) and Schularick, and Talyor (2012).

CMIM is basically a U.S. dollar liquidity support arrangement with the IMF linkage, thereby excluding the local currency swaps. The necessity and desirability of including local currency swaps must be discussed in the future when the RMB increasingly obtains the full convertibility status vis-à-vis the U.S. dollar.

An important challenge for ASEAN+3 authorities is to strengthen the effectiveness of regional economic surveillance supported by ASEAN+3 Macroeconomic Research Office (AMRO) to reduce and ultimately eliminate the CMIM's IMF linkage so that ASEAN+3 member countries can use the CMIM in both crisis and near-crisis situations without the IMF program. As long as the IMF linkage remains, the countries having only the dollar liquidity crisis will not willingly request activation of the CMIM mainly because of the incredibly punishing stigma effect. Kawai (2015) clearly pointed out that the key is to improve the quality of regional economic surveillance and create conditions to promote further IMF delinking. For this purpose, AMRO should become a credible international organization tasked with regional economic surveillance and liquidity support in times of financial and currency turmoil so that it can assess the economic and financial conditions of countries requesting assistance and formulate lending conditionality. A new version of Asian Monetary Fund (AMF), which was dismissed by the U.S. during the Asian financial crisis, is suggested.

RMB internationalization will be an arduous process that takes considerable efforts and time. During the transition to full convertibility and free floating, RMB internationalization will generate totally different shocks to many Asian countries. Although its expansion remains unknown, the international use of the RMB will definitely cause many Asian countries to be sensitive to the RMB stability. Many Asian banks and corporations will hold RMB-denominated assets and liabilities. Although China's Bilateral Swap lines can be used, the CMIM excludes local currencies, such as the RMB. Therefore, RMB swap lines will be as important as the U.S. dollar.[16]

The answer to the questions regarding the desirability of Asian monetary cooperation is at best speculative. Any possibility to create a common currency area (monetary arrangement) is unlikely

[16] Ito (2016) emphasizes the role of local currency swaps as a regional arrangement to bail out a crisis country as RMB internationalization proceeds.

in consideration of almost non-existent political will among Asian countries. Furthermore, scant evidence shows that exchange rate movements among East Asian countries exert a strong negative effect on intra-regional trade (Shin, and Wang 2007). Nevertheless, RMB internationalization may change the landscape of Asia's industrial and economic structures and promote the trade and financial integration, thus generating macroeconomic and financial effect on many Asian countries. RMB internationalization should be on the agenda for the policy dialogue among ASEAN+3.

VII. Concluding Remarks

The scale and speed of China's emergence as a major global actor, whose economy is set to overtake that of the U.S. by the end of the present decade, has been the most important international event since the end of the Cold War. Nevertheless, China's ascent has bred a set of misconceptions that obscure the reality of a country, and the basic building blocks of interpretation are often incomprehensible. Irwin (2013) noted in his book that Governor Zhou offered a fitting metaphor for the differences between Chinese and Western economic policy. He said, "a drug from Western medicine, which is based on the theory and clinical trials, usually contains one ingredient and has a quick effect, while a prescription of Chinese medicine includes various ingredients that work together to treat a disease." He added, "some drugs with large side effects may be removed, or reduced through trial and error. This is learning through experience, with endless adjustments."

Zhou and PBOC were persistent and opportunistic in pushing for RMB internationalization. They consistently promoted the idea that China's currency should one day stand alongside the dollar, euro, and yen as an important currency for global trade and finance. However, no clear announced roadmap exists. In public communications, Zhou and PBOC soft-pedal the idea that they are trying to make the RMB a major global currency. In official documents, the phrase used for the phenomenon is not "RMB internationalization," but "the RMB going out," which means going beyond China (Irwin 2013). China is supporting the use of the RMB in international transactions before fully liberalizing other aspects of its economic and financial policy. China's approach toward RMB internationalization is certainly cautious and gradual, as Eichengreen (2015) describes the Chinese preference for "crossing the river by feeling the stone's beneath one's feet." Considerable progress and time will be required in reforming domestic financial markets and institutions before removing the residual restrictions on international financial transactions that limit the international use of the RMB.

The RMB will unlikely replace the role of the U.S. dollar because the euro could not challenge the status of dollar during the last decade or so. The power of strong network externalities of the dollar will not vanish anytime soon. Despite without a formal monetary arrangement such as the euro, the RMB may achieve a regional settlement currency within Asia, given the increasing volume of trade with China. In the long run, many Asian countries, including South Korea, will increasingly use RMB for both international trade and finance. The possibility of forming a RMB bloc should not be ignored.[17] The expected candidates for RMB bloc may include Hong Kong, Taipei, and countries enjoying strong trade and investment linkages with China. Countries that belong to RMB bloc tend to attain co-movements of exchange rates with the RMB. China should subsequently exert strong leadership in the monetary and financial fronts to ensure a financially resilient RMB bloc.

(Received 6 October 2016; Revised 8 November 2016; Accepted 8 November 2016)

[17] Recent empirical studies on the emergence of RMB bloc using the Frankel–Wei (1994) model exist. See Henning (2012), Subramanian, and Kessler (2012), Kawai, and Pontines (2014), and Ito (2016).

Appendix

Appendix Table 1
List of Local Offshore RMB Clearing Banks

Offshore RMB Center	Authorized Date	Authorized Bank
Hong Kong	December, 2003	Bank of China, Hong Kong
Macau, China	August, 2004	Bank of China
Taipei	February, 2013	Bank of China
Singapore	May, 2013	Industrial and Commercial Bank of China
London, U.K.	June, 2014	China Construction Bank
Frankfurt, Germany	June, 2014	Bank of China
Seoul, South Korea	July, 2014	Bank of Communications
Paris, France	September, 2014	Bank of China
Luxembourg	September, 2014	Industrial and Commercial Bank of China
Doha, Qatar	November, 2014	Industrial and Commercial Bank of China
Toronto, Canada	November, 2014	Industrial and Commercial Bank of China
Sydney, Australia	November, 2014	Bank of China
Bangkok, Thailand	January, 2015	Industrial and Commercial Bank of China
Kuala Lumpur, Malaysia	January, 2015	Bank of China
Santiago, Chile	May, 2015	China Construction Bank
Budapest, Hungary	June, 2015	Bank of China
Johannesburg, South Africa	July, 2015	Bank of China
Buenos Aires, Argentina	September, 2015	Industrial and Commercial Bank of China
Zurich, Switzerland	January, 2016	China Construction Bank
New York	September, 2016	Bank of China

Source: Wikipedia (2016)

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